Appln. No.: 10/501,047

Amendment Dated August 28, 2007 Reply to Office Action of June 28, 2007

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) An electrocatalyst ink comprising

a particulate electrocatalyst consisting of one or more optionally supported electrocatalyst metals;

one or more proton-conducting polymers; and

particles consisting of graphite which are present at a loading of 1 to 40 weight % with respect to the weight of the electrocatalyst.

- 2. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the graphite is present at a loading of 2 to 25 weight % with respect to the weight of the electrocatalyst.
- 3. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the one or more electrocatalyst metals is platinum.
- 4. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the electrocatalyst is either a supported metal catalyst or an unsupported finely divided metal black.
- 5. (Original) An electrocatalyst ink according to claim-4, wherein the electrocatalyst metal is supported on a high surface area particulate carbon.
- 6. (Previously Presented) An electrocatalyst ink according to claim 1 further comprising a solvent, wherein at least 75 weight % of the solvent is water.
- 7. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the solids content of the electrocatalyst ink is between 5 and 50 weight %.

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8. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the weight ratio of the electrocatalyst to the one or more proton-conducting polymers is between 1:1 and 10:1.

- 9. (Previously Presented) A process for preparing an electrocatalyst ink, said process comprising mixing a particulate electrocatalyst consisting of one or more optionally supported electrocatalyst metals with one or more proton-conducting polymers and particles consisting of graphite in a liquid medium, wherein the graphite is present at a loading of 1 to 40 weight % with respect to the weight of the electrocatalyst.
- 10. (Previously Presented) A process for preparing an electrocatalytic layer using an electrocatalyst ink according to claim 1, said process comprising applying the electrocatalyst ink to a substrate.
- 11. (Previously Presented) A gas diffusion electrode comprising a gas diffusion substrate and an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1.
- 12. (Previously Presented) A catalyst coated membrane comprising a solid polymer membrane and an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1.
- 13. (Previously Presented) A membrane electrode assembly comprising an electrocatalytic layer prepared using an electrocatalyst ink according to claim 1.
- 14. (Previously Presented) A process according to claim 9, wherein the liquid medium is aqueous.
- 15. (Previously Presented) A process according to claim 9, wherein the liquid medium is organic.
- 16. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the electrocatalyst is a supported metal catalyst.
- 17. (Previously Presented) An electrocatalyst ink according to claim 1, wherein the electrocatalyst is an unsupported finely divided metal black.

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18. (Previously Presented) An electrocatalyst ink according to claim 1, wherein none of the one or more electrocatalyst metals is supported on a graphite support.